

A Gentle Adventure to Certify Multiparty Communication

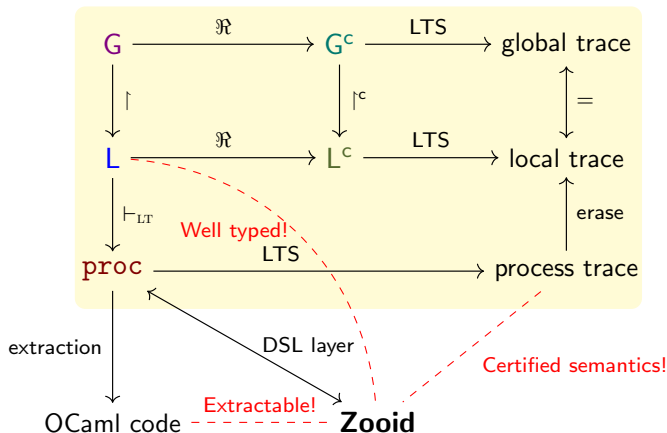
Act III

David Castro-Perez¹ Francisco Ferreira² Lorenzo Gheri²
Nobuko Yoshida²

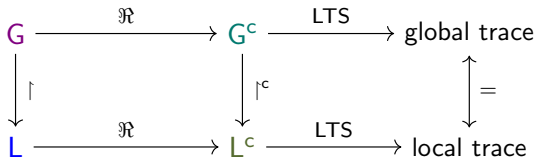
¹ University of Kent ² Imperial College London

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Zooid



Multiparty Session Types for Zooid



Projection

Global and Local Types

global types syntax

local types syntax

global types example

local type example

Coinductive Global and Local Types

coglobal types syntax
colocal types syntax

coglobal types example
colocal type example

Towards Semantics with Coinductive Projection

projection commutes (figure)

Let's go to Coq!

semantics diagram

With Love, from p to q

picture of basic send-receive

Tools for our LTS

labels and basic G step
environments
queues/buffers (async)
local transitions
traces

Theorems

results

Flavourful Lemma(s)

→ Coq!

Conclusion

Please, read the paper.
Thanks!